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Review on Android System Modification Tool by Using Shell Script

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ABSTRACT: The Android is an Open Source Operating System that enables Users to Modify it Without any restrictions but internal Modifications of Android System is difficult for a Normal User. This paper proposes Easy Modification of Android System for Normal Users. The ADB is an Android Debug Bridge Which Enables an Android Device to be Modified through another Device. Android Modification is a Need for Normal Users as well as Industries which provide Services related to Android.

KEYWORDS: Android Debug Bridge, Shell Script, Android, Root.

I. INTRODUCTION

The Android is an Open Source Operating System Based on Linux Kernel. The Android Users can modify the Operating System Without Any restrictions. The Android System Modification Tools Enables the Normal Android Users as well as knowledgeable Users to Modify their Android OS Easily. Android Modification tool has 9 Modules 1. BootAnimation, 2. Settings Control, 3. Power/Reboot Options, 4. Modify Build Properties, 5. Permission Management, 6. Partition Remount, 7. Custom Script, 8. Partition Backup. These Modules help the Users To customize different Parts of the Android System. Google provides Platform-Tools for Connecting and debugging the Android Devices using Desktop/Laptop devices. In Android System Modification tool, we have used Android Debug Bridge for Connecting the Android device with the Host Machine. The Android System Modification Tools Mainly Modifies the Android System's File System and Partitions. And Make the Changes as required by the User.

The Android OS is divided into many partitions, these partitions stores important Data of Android OS except SDCARD partition which is accessible by normal user. Other partitions like System, Vendor, rootfs are not accessible by normal users, to access this partitions user needs to Add 'su' Binary in the System. The Android System Modification Tools take the access of the SU binary and Modifies the Android System, all this process is done through ADB and platform Tools.

The Android Modification Tools is Based on Linux Platform. Shell Scripting language is used to Developed the Tool. The Android Modification Tool provides faster execution. The Tools Provides Simple Graphical User interface Using Whiptail program.

II. LITERATURE REVIEW

The Android is an Open-Source Operating System Based on Linux Kernel. The Android Users can modify the Operating System Without Any restrictions. The Android System Modification Tools Enables the Normal Android Users as well as knowledgeable Users to Modify their Android OS Easily. The Android System Modification Tools Designed to help in corporate bussiness, including IT sector, Educational institute, Marketing bussiness, Manufacturing bussiness to manage their android devices to customize according their company requirment, it will to customize Logo, Setting control, Modify Build in property, File permission, Memory partion can be manage by user accoring to thier requirment, Run Custom Script, Partition Backup will help user to recover lost memory If the company tries to do this thing manually it will be time consuming, lots of resorces, more manpower, less accuracy, more expensive. If the

company tries to do this thing manually it will be time consuming, lots of resources, more manpower, less accuracy, more expensive. with the help of our software normal user can modify the android devices, where it will be less time consuming, no need of high-level resources, will not require more manpower, work will be more accurate, more satisfactory, less expensive. This software will help the company to be more productivity, will also help to boost in their business.

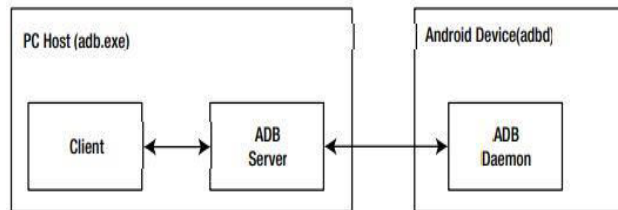


Fig. 1. ADB setup with its three key modules

ANDROID DEBUG BRIDGE:-ADB stand for “Android Debug Bridge”, is the tool that Google supply along with the Android framework to facilitate debugging and managing an Android system. As specified in the name the ADB works as a bridge between Android Device connected in debugging mode and a PC ADB uses USB. ADB establishes a connection between Android Device and a PC. ADB is a command line tool, it can run directly in Terminal/CMD. ADB provides very much power to user to debug and modify the Android. ADB works in a simple client/server architecture, and is made up of three key components server, client, ADB daemon.

SHELL SCRIPT:- A shell Script is a command-line interpreter or shell that provides a command line user interface for Unix-like operating systems. The shell is an interactive command language and a scripting language and is used by the operating system to control the execution of the system using shell scripts. A shell script is normally created for command order in which a user has a need to use continuously in order to save time. Like other programs, the shell script can hold parameters, comments and subcommands that the shell must be follow. Users take action on the order of commands in the shell script by simply get in the file name on a command line.in Unix and Linux, their are two main types of shell scripts first is a Bourne again shells (BASH)- BASH is the default shell for Unix version7. The character for reminding a bourne again shell is \$. And second is a C shells- A C shell is run in a text terminal window, and it can simply read file commands. The character for reminding a C shell is %.

WHIPTAIL:- Whiptail is tool which lets you can create GUI and display dialog boxes from shell scripts. This makes your shell scripts look attractive and more professional while still providing large scale functionality. Menu boxes, as the name indicate, gives you a list form of options to choose. The syntax for the menu boxes is: \$ whiptail --menu [TEXT] [HEIGHT] [WIDTH] [MENU HEIGHT] [TAG] [ITEM] Here we also need to declare the MENU HEIGHT, which show how many items would be shown on the Prompt menu. Then we need to declare an ITEM and a TAG by which the item would be recognize. You can declare as how many as you want as whiptail allows for scrolling

III.CONCLUSION

This paper Conduct research on Android System Modification. The Android System Modification is important For Creating a Customized Device. With Android System Modification Tool, it is now possible to Modify Android System easily for Normal Users as well as for people having Knowledge. Android System Modification so far needs lots of research for becoming an Industry level tool. Android is an open-source operating system therefore anyone can create android operating system but creating an operating system from scratch is a very complex task because of this user fail to take advantage of android system modification tool is a tool that helps to make the process easy for modification of android system the tool comes with simple interface that can be easily understood by users it has modules that helps to modifies the android system according to users need The tool helps the user to modify Boot animation, settings, Build properties, Permissions and Partitions. It has more features like Custom script, Partition backup, power reboot options, etc. The tool has been tested in different condition and it does accurate modifications in android system

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